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(19) **United States**(12) **Patent Application Publication** (10) Pub. No.: **US 2003/0224259 A1**  
Verschueren et al. (43) Pub. Date: **Dec. 4, 2003**(54) **METHOD OF LITHOGRAPHIC PRINTING  
FROM A REUSABLE ALUMINUM SUPPORT****Publication Classification**(75) Inventors: Eric Verschueren, Merksplas (BE);  
Joan Vermeersch, Deinze (BE)(51) Int. Cl.<sup>7</sup> ..... **B41M 7/00; G03F 7/26**  
(52) U.S. Cl. .... **430/19; 430/300; 101/450.1;**  
**101/465; 101/467; 101/478****Correspondence Address:****LEYDIG VOIT & MAYER, LTD**  
**TWO PRUDENTIAL PLAZA, SUITE 4900**  
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**CHICAGO, IL 60601-6780 (US)**(57) **ABSTRACT**

A printing method is disclosed wherein a grained and anodized aluminum support is coated with an image recording layer comprising hydrophobic thermoplastic polymer particles. The heat-sensitive imaging material thus obtained is then image-wise exposed and processed, thereby obtaining a material having a lithographic image which consists of hydrophobic printing areas on a hydrophilic support and which is used as a printing master in a printing press. After the press run, the lithographic support is recycled by removing the hydrophobic printing areas from the hydrophilic surface of the aluminum support. The recycled support is then reused in a next cycle of coating, exposing, processing and printing. By using a grained and anodized aluminum support having a hydrophilic surface with a surface roughness, expressed as arithmetical mean center-line roughness Ra, which is less than 0.45  $\mu\text{m}$ , the run length of the printing master is improved.

(73) Assignee: ~~AGFA-GEVAERT~~, Mortsel (BE)(21) Appl. No.: ~~10/431,191~~(22) Filed: ~~May 7, 2003~~**Related U.S. Application Data**

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(30) **Foreign Application Priority Data**

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Princ. DB

Barnett 5308746 2/3-12

Shinichi 61-219044

Walls 4880555 Ab 3/10-30

alcohol

toluene  
xylene

09/736,824

10/736,821

6487970

6460458

10/007,911 - allowed

10/010,697 - reject.